Notes from the Upper Rio Grande Basin Water Operations Review Steering Committee Meeting; December 6, 2001; 9:00 AM; Corps of Engineers; Albuquerque, New Mexico

In attendance:

Raymond Abeyta, USBR

Neal Ackerly, Corps/Dos Rios

*Charles Braden, BIA

*Lee Brown, Middle Rio Grande Water Assembly

Carolyn Brumfield, Corps

*John Carangelo, SSWCD & Socorro Regional Water Planning

Art Coykendall, USBR

*Cliff Crawford, UNM

*Jim Davis, NMED

*Gina DelloRusso, Bosque del Apache NWR

Ellen Dietrich, Corps/SAIC

*Gary Esslinger, EBID

Richard Fike, Corps

Susan Goodan, Corps/SAIC

Rhea Graham, NMISC

*Sterling Grogan, MRGCD

Laura Hagan, JSAI

*Steve Hansen, USBR

Deborah Hathaway, NMISC/SSPA

Susan Jordan, Pueblo of Isleta

Steve Kolk, Bureau of Reclamation

Dick Kreiner, Corps

Derrick Lente, Pueblo of Sandia

*Amy Lewis, City of Santa Fe and Jemez y Sangre Regional Water Planning Group

Dagmar Llewellyn, NMISC/SSPA

*Charles Lujan, Pueblo of San Juan

Russ MacRae, USFWS

*Julie Maitland, NMDA

Mike Marcus, NMISC/SWCA

*Palemon A. Martinez, NMISC

✪Ken Maxey, USBR

*William J. Miller, Corps/WJM Engineering

David Morgan

*Chris Perez, USFWS

✪LTC Ray Midkiff, Corps

Garret Ross, USBR

Gary Rutherford, Corps

Blane Sanchez

✪Rolf Schmidt-Peterson, NMISC

*Herman Settemeyer, TNRCC

John D. Sorrell, Pueblo of Isleta

*Tod Stevenson, NMGF

Gail Stockton, Corps

Julie Tsatsaros, NMED/SWQB

*Steve Vandiver, CDWR

Jack Veenhuis, USGS

*Steve Wagner, R. F. Weston

* denotes Steering Committee member or their representative.

✪ denotes Executive Committee member or their representative.

- These notes summarize the presentations and discussion, and note questions and answers that were provided. Handouts included notes from previous Steering Committee meetings, charters of the Executive and Steering Committees, summaries of the No Action and draft action alternatives, fact cards on the facilities, and cards for each draft alternative.
- LTC Midkiff welcomed everyone to the meeting and told the group that he hoped to get input from the Steering Committee on the draft alternatives and their presentation to the public.
- Gail Stockton presented an overview of project activities to date.
  - 2000
    - January: Memorandum of Agreement signed by the Joint Lead Agencies (JLA)—Corps of Engineers, Bureau of Reclamation, and New Mexico Interstate Stream Commission
    - March: Notice of Intent to conduct Water Operations Review and EIS was published in the Federal Register
    - December: First meeting of the Steering Committee
    - June-October: Public scoping meetings were held. Recommendations from the meetings included requests to return to discuss the draft alternatives before they were finalized.
    - Other activities: Executive Committee and technical teams formed; draft plans of study developed by technical teams; letters to tribes to invite participation
  - 2001: Various activities
    - Developed a procedure for creating the alternatives
    - Developed the draft alternatives
    - Quality Assurance/Quality Control Plan developed and approved by Executive Committee
    - Developed and began implementing procedure for documenting the Administrative Record
    - Technical team plans of study incorporated into an overall draft work plan
    - Began formal tribal consultation through letters and meetings
  - Question—What initiated the Water Operations Review?
    - Response from the Corps
      - The staff recognized that there was no tool to analyze the complete river system. Other agencies were also interested in developing an analysis tool.
      - ESA issues and the degradation of the river pointed out the need to better manage water operations.
      - The contract for a sediment pool at Jemez Canyon dam was expiring.
      - They recognized the need to involve the USBR and the NMISC.
      - It was time to revise the Water Operations Manual for the Rio Grande.

- Response from USBR
  - The staff saw the need to evaluate operation of the Low Flow Conveyance Channel.
  - They recognized that the middle valley was up against the limits of its resources.
- Response from NMISC
  - The staff saw that ESA concerns were likely to result in making normal operations difficult and had the potential to affect Compact deliveries.

❖ Steve Kolk gave a slide presentation on the purpose and need for the project, the existing authorities governing water operations for the Joint Lead Agencies, and development of the draft alternatives.

➢ Steve reviewed the information cards that the Project Managers propose to use in the public meetings to summarize the current operations of existing facilities under the No Action Alternative.

➢ The criteria to be used to screen the draft alternatives require that each alternative:

- Meet the Purpose and Need statement in the MOA;
- Is within existing authorities;
- Is physically possible to implement.

➢ The draft alternatives now describe single-facility operations, but will be assembled into action alternatives that address all JLA operations in the system before analysis of impacts is conducted.

❖ Further questions were raised about the meaning of the Purpose and Need statement developed for the Water Operations Review. Because understanding of this is critical to the project, the statement was discussed in more detail.

➢ The purpose of water operations was summarized as "getting water to the right place at the right time". The main issue is the need to determine how water would be distributed to all consumers, and what the JLA can do to affect this.

➢ The No Action Alternative addresses what can be done with the operations and protocols currently in place.

➢ The action alternatives will be evaluated to determine how they affect resource values.

❖ Gail followed with additional information on the draft alternatives. Questions listed below reflect feedback from the Steering Committee members.

➢ The No Action cards plus the wild card is the only hand that water managers now have for water operations. The alternatives will offer additional options whose impacts must be evaluated.

➢ Question—Will you evaluate the impacts under low, medium, and high flows?

- Response—Yes, using URGWOM with historic data from 1975 to 2001 and with data repeated to evaluate wet or dry years. For example, data from the 1980s wet period could be repeated in the Planning Model to represent a string of wet years.

- Question—Would data from the early 1900s into the 1930s be used?
  - Response—These data are not complete enough to use in URGWOM. However, data could be synthesized or added as needed to represent a similar situation for modeling purposes. The purpose is to represent a historically reasonable set of flows.
- The Project Managers decided that the best way to develop alternative operations for each facility would be to identify the flexibility allowed by existing authorities that is not being taken advantage of currently. Then they would develop alternatives that make use of that flexibility, with the assistance of the technical teams.
  - They hope to have a full range of options to determine how system operations can work in concert.
  - The interaction of all water operations can have impacts on the system. These impacts will be evaluated in the EIS.
- Question—Will the recent Biological Opinion be incorporated into an alternative?
  - Response—Yes, this will be part of the No Action Alternative, as will other actions already evaluated through NEPA.

❖ Gail reviewed the draft alternatives for each facility. She noted that the draft alternatives have not yet been through the initial screening to determine whether they meet the criteria listed by Steve. Questions below came from both the Steering Committee and others in attendance.

- Closed Basin Project—It was suggested at the public scoping meeting that the Review evaluate the potential for renovating the wells so they would pump up to their maximum authorized amount.
  - Question—Is there a maximum amount of water that can be safely pumped?
    - Response—The main constraint is that the water table cannot be lowered more than 2 feet due to pumping.
  - Question—Can new wells be developed within the authorization?
    - Response—Yes. USBR has already drilled some new wells using a different configuration to reduce biofouling.
- Platoro—No flexibility was identified so there would be no change in operations proposed.
- Heron—Policy changes related to whether there is a waiver would be considered. This flexibility should be added to the fact card.
- El Vado—This is not part of the Review because it is not within JLA authorities to propose changes.
- Abiquiu—Native Rio Grande storage was an original issue that the Corps wanted to address. The Review will assume that the water to be stored belongs to the City of Albuquerque and will be stored during spring runoff. The safe channel capacity issue was identified during public scoping and by the technical teams.
  - Question—With the channel incision below Abiquiu, what flows would be necessary to reduce overbank flooding?
    - Response—The current channel capacity is approximately 1,800 cfs below the dam; 2,500 cfs would overtop the acequias. The alternatives would evaluate the

impacts of these and possibly other flows. Watershed problems that might affect flood flows would be identified for further study outside of the Review.

- Cochiti—Safe channel capacity downstream from the dam was identified early by the Corps due to encroachment problems that limit their ability to provide adequate flood control.
  - Question—How can you increase channel capacity if you will not mechanically modify the channel?
    - Response—Through water operations, we could use flows in the river to scour the channel. No mechanical means will be used.
  - Question—Would it be possible to have native storage in Cochiti?
    - Response—There is no authority for conservation storage, so this would require a change in the law.
- Jemez Canyon—Two possible alternatives are under consideration, sediment flushing and sediment storage.
- Question—Will you consider the operation of PL-566 dams for sediment and flood control?
  - Response—These are not within the authority of the JLA. If a Steering Committee member writes down this issue, the Project Managers would forward to the NRCS for consideration.
- Low Flow Conveyance Channel (LFCC)—The No Action Alternative allows for the diversion of up to 2,000 cfs into the LFCC. The alternative would evaluate the amount of water left in the Rio Grande and not diverted. It would identify needed flows in the mainstem and the factors that would determine how much would be left or diverted.
  - Question—Would you include diversions to or pumping from the LFCC?
    - Response—These actions are part of the No Action Alternative. Diversions from 0 to 2,000 cfs will be evaluated in the No Action Alternative, along with their effects on Compact deliveries. The main purpose of the action alternatives would be to identify how much water to keep in the mainstem.
  - Question—Can you evaluate the operation of the LFCC as a drain?
    - Response—This is part of the No Action Alternative.
- Elephant Butte—No flexibility was identified. Only operations related to flood control will be evaluated.
  - Question—Why will only flood control be evaluated?
    - Response—Due to the litigation, we have been instructed not to address water supply issues. URGWOM modeling for water supply in Elephant Butte was not permitted by the court.
  - Question—What flood control issues will be addressed?
    - Response—Prudent flood space.
  - Suggestion from the Steering Committee—State in the fact card on Elephant Butte that the evaluation will be limited in scope but not limited by JLA authorities.

Integrate flood control protocol and coordination in the alternative for Elephant Butte, similar to what was done for Caballo.

- Suggestion—Consider different levels of storage in Elephant Butte for hydrologic conditions, then consider how native storage in Abiquiu would help conserve water, improve middle valley flows, and reduce evapotranspiration, while meeting Compact requirements.

- Caballo—Flood control is the responsibility of the USIBWC. The action alternative would improve the definition of how Corps operations upstream affect Caballo operations and develop a protocol for operations and communications.
- Communications—An alternative will be developed to focus on improving communications between agencies, with tribes, and with the public. It would include using URGWOM to inform the public of operating plans and reasons for decisions.
- Mitigation and Enhancement alternative—These measures need to be developed to go with any alternative.
- In the public meeting, the Project Managers will explain that selections from the proposed changes to operations for each of the above facilities would be represented by different cards. These groups of cards would make up different hands (alternatives) and would be combined with the wild card, which represents events out of control of the agencies, such as the weather and hydrologic variability.
- Question—How will you addresses the variety of water uses, losses, and demands?
  - Response—These would be described as part of the affected environment, based on URGWOM modeling at a fairly coarse level. However, the Review is not a water balance evaluation.
- The draft alternatives will be reviewed to determine whether they are physically possible. Then a more detailed description of the alternatives will be developed. Once this is done, the final set of alternatives will be analyzed to determine their impacts on natural, social, and cultural resources.
- Question— How will the final EIS be organized? Will there be one possible operation per facility selected for each alternative?
  - Response—More than one operation per facility will be needed to allow managers to react to different conditions. It is anticipated that, in the end, a set of operations will be selected as the Preferred Alternative that would work under a range of conditions.

❖ The Steering Committee was asked for suggestions on how to interest people in attending the meetings, in giving feedback on the alternatives, and on the content of the meetings. The purpose of the next round of public meetings is to get feedback on the alternatives before they are finalized. Suggestions included the following.

- The "drivers" that caused the Water Operations Review to begin should be summarized early in the public meetings. A joker card could be created that lists these drivers.
- After each bullet in the Purpose and Need statement, list the drivers and issues that caused it to be included. This would help tie together the Purpose and Need items with the reasons for conducting the Review.
- Point out that all facilities are now operated independently, and that, with better communication, they would be operated as an integrated system.

- More written information on the alternatives should be provided.

❖ Mark Yuska, leader of the URGWOM Technical Team, gave a slide presentation on URGWOM and the development of the Planning Model.

- The Planning Model will be a modification of the URGWOM daily Operations Model. The Operations Model is best at forecasting flows for the entire system, while the Planning Model would be best at predicting storage of facilities over a long period. Differences between the Operations and Planning Models are summarized below.

URGWOM Operations Model	URGWOM Planning Model
▪ Short time period	▪ Long time period
▪ Uses real runoff forecasts	▪ Uses historic runoff forecasts
▪ Flow focus	▪ Volume focus
▪ Full water accounting	▪ Less detailed water accounting
▪ Credible daily resolution	▪ Hypothetical daily resolution
▪ Static system-based	▪ Changing system-based

- There are major challenges in developing a Planning Model for the Technical Team. They anticipate that the first draft will be ready to test next spring.
- Question—What do you mean by river leakage in URGWOM?
  - Response—It is used to represent all water leaving the river, but it also recognizes returns downstream. In general, it is the relationship between such factors as consumptive use, deep percolation, return flows, surface water evaporation, and evapotranspiration. It is based on a MODFLOW model that has been developed for each reach.
- Question—What is the simplified water accounting?
  - Response—There were two questions perceived here. One was on simplified Rio Grande Compact Accounting, and the other was on general simplified SJ-C accounting. The answer to the first is that in a reasonably simple way, the model has to be able to make decisions on how to make Compact Deliveries or store Compact water. The answer to the second is that we reduce the 16 SJ-C contractors down to City of Albuquerque, MRGCD, and the rest lumped into one.
- Question—Will the Planning Model flag Compact delivery problems if they arise?
  - Response—Nabil Shafike of the NMISC is developing this now, so this has yet to be determined.
- Question—Who will use the Planning Model?
  - Response—The Water Operations Review technical teams will use it first. Then they hope to provide public access to the model via the web after the EIS is completed.
- Question—Is the Operations Model used now?
  - Response—The Forecast and the Operations Models are now used to develop the Annual Operating Plan.

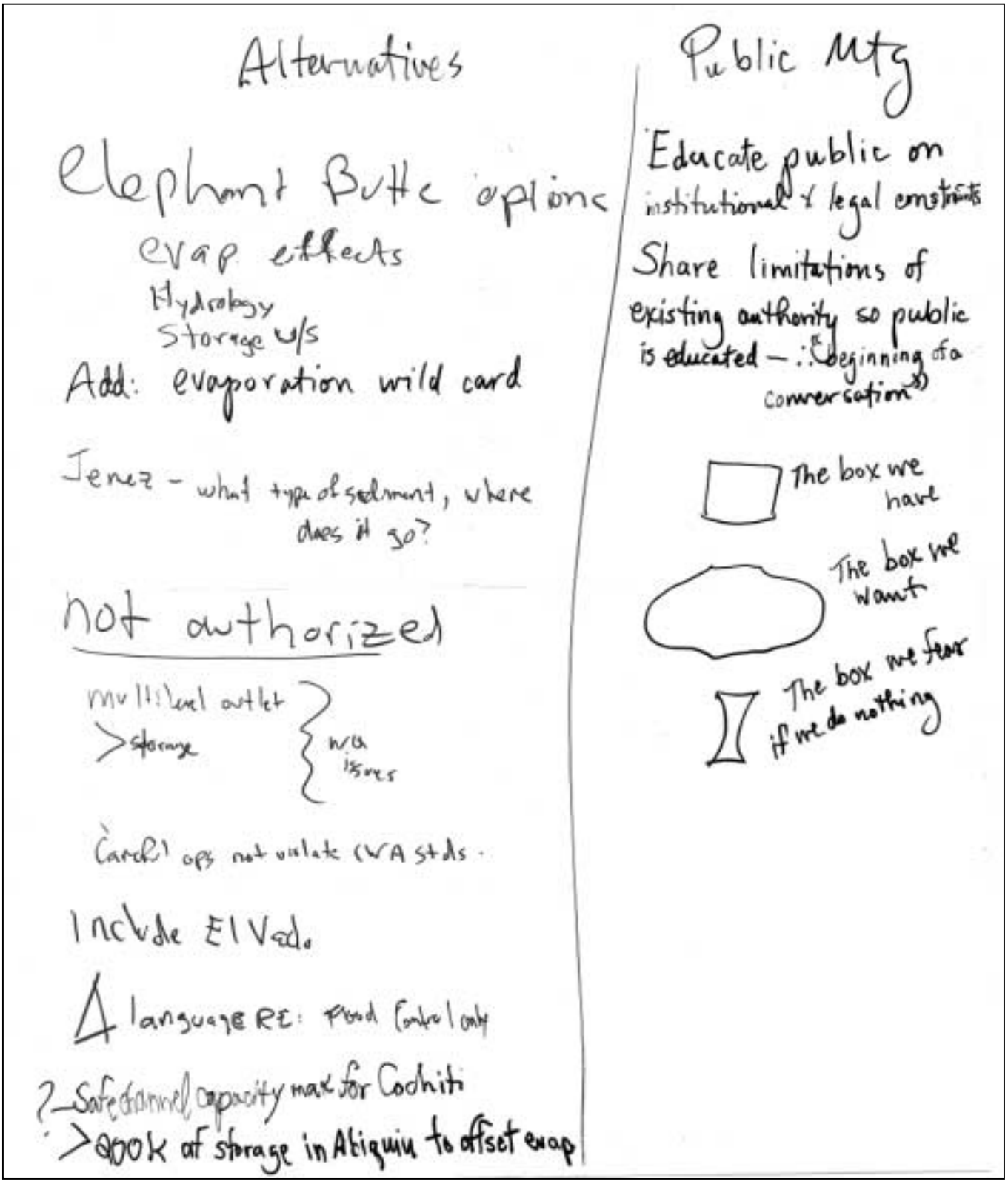
- Question—How much error would you expect when you compare the output from the Operations and the Planning Models?
  - Response—We haven't generally thought of it in this way, comparing the two model versions. There really isn't any difference in the errors expected, except from varying input data. Both use the same physical development.
- Question—Does the Operations Model take water to Elephant Butte?
  - Response—Both the Operations and Planning Models will model to El Paso, but only flood control operations are included below Elephant Butte.
- Question—If the litigation ends, will you develop a separate model to model the river below Elephant Butte?
  - Response—Currently, physical river system has been developed for this reach. To model water supply operations, the Technical Team would need to develop rules for water delivery. A separate model would not be necessary.
- Question—How do you show releases from Elephant Butte now?
  - Response—URGWOM uses historic data, but the Technical Team is open to suggestions on something better.
- Question—Do you have data for water deliveries above Cochiti?
  - Response—URGWOM uses simplified monthly diversion data and counts diversions at major dams.

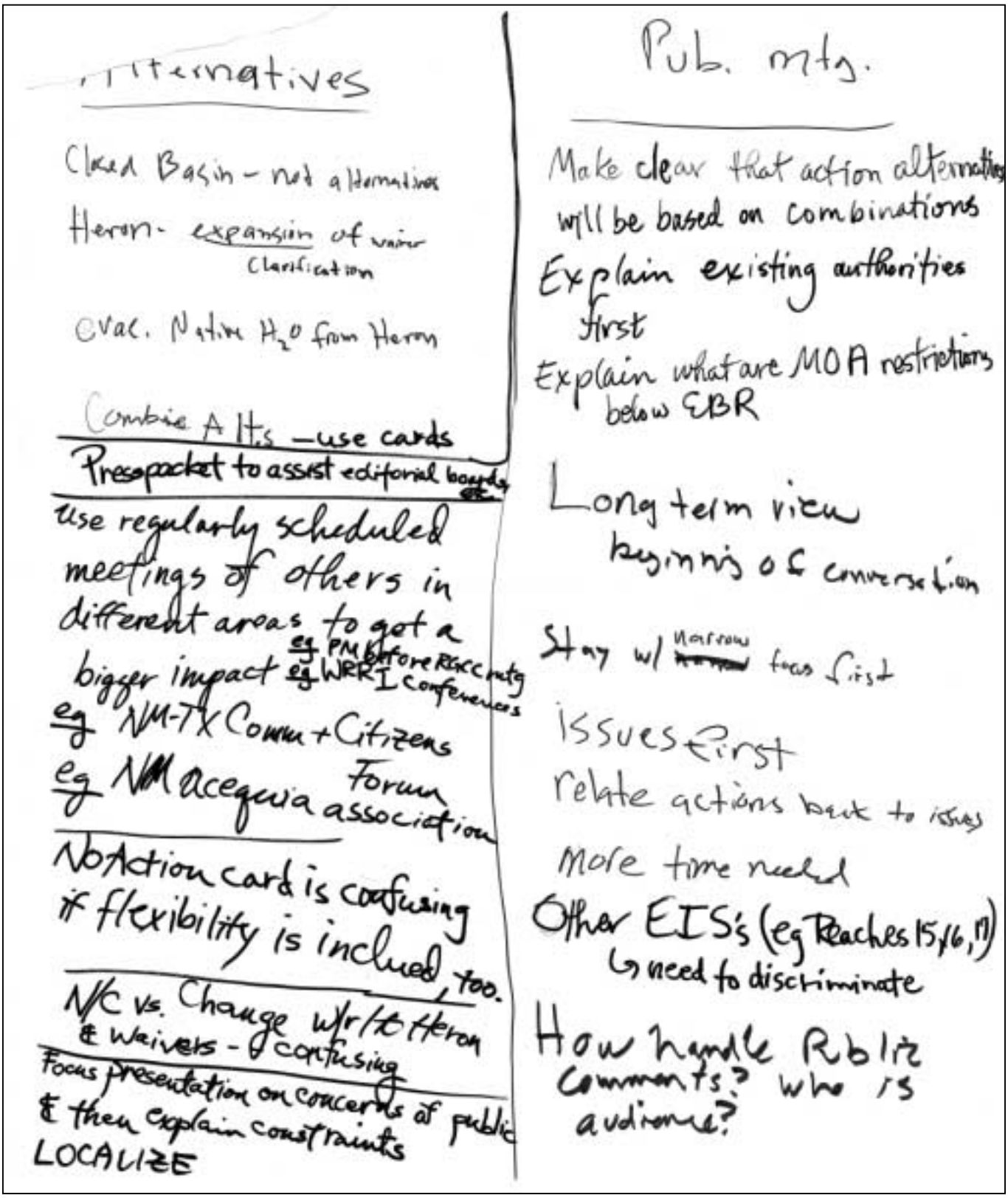
❖ After breaking up into small groups to discuss recommendations for new ideas or changes in the alternatives and their presentation at the upcoming public meetings, the Steering Committee presented some ideas to the Project Managers who wrote them on flip charts. Copies of the flip charts are at the end of these notes.

- EIS Alternatives
  - Consider different levels of storage in Elephant Butte and relate to evaporation. If the model were run for the period of record, different storage levels would be evaluated.
  - Sediment data are needed to evaluate impacts on the system.
  - Actions that are not authorized but that are identified as needing to happen should be documented and studied.
  - Use caution that water operations proposed do not result in violations of the Clean Water Act.
  - Consider the following:
    - What have the Joint Lead Agencies done in the past to distribute water to various interests within existing authorities (constraints)?
    - What improvements can be made, what flexibilities have been/can be identified, and what is physically feasible.
    - How can coordination among and between the water management agencies in meeting water interests' needs be improved and/or lead to an integrated river management system?

- Public meetings
  - Comments reflected that the Steering Committee liked the use of the cards to demonstrate the alternatives.
  - Allow the public to identify issues/problems/challenges/concerns on a "wildcard"/"joker" as a feedback mechanism.
  - Public participation should be from an educated point of view. People attending the meeting need to understand the treaties, laws, and agency authorities that constrain JLA actions.
  - Explain the long-term view, how results will work on a larger scale, after discussing the narrow, short-term view of the Water Operations Review.
  - Take one or two issues that the public is most likely to be concerned with and explain how they would be addressed in the Review and EIS.
  - Explain how this EIS relates to other projects in the basin.
  - Focus presentations on issues of importance to the local public.
  - Make use of other public meetings in the area, such as the Advisory Board of the USIBWC in El Paso, the Rio Grande Compact Commission meeting, and the WRRI conference.
  - Coordinate with regional water planning groups.

Copies of the flip charts from the meeting:




Alternatives
Closed Basin - not a alternative
Heron - expansion of water Clarification
Eval. Native H_2O from Heron
Combine Alts - use cards
Presepacket to assist editorial boards
use regularly scheduled meetings of others in different areas to get a bigger impact eg PM before RGCC mtg eg WRRI conferences
eg NM-TX Comm + Citizens Forum
eg NM acequia association
No Action card is confusing if flexibility is included, too.
N/C vs. Change w/r/t Heron & waivers - confusing
Focus presentation on concerns of public & then explain constraints
LOCALIZE
Pub. mtg.
Make clear that action alternatives will be based on combinations
Explain existing authorities first
Explain what are MOA restrictions below EBR
Long term view
beginning of conversation
Stay w/ narrow focus first
issues first
relate actions back to issues
more time needed
Other EIS's (eg Reaches 15/16, 17)
need to discriminate
How handle Rblic Comments? who is audience?